# Goals of the project

- Goals of the Project „Development of a Pilot Ecological Network through Nature Frame areas in South Lithuania“
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# Lot of nice wetlands in corridors with for Europe diverse biodiversity.

# Process in a Restored ponds

# 160 different pond project sites: A new pond near a wetland

# The importance of species in the corridor

- KEY TARGET:  Emy Orbicularis . Hyla arborea.
- SECONDARY: Bombina bombina, Tristurus cristatus, Pelobates fuscus, Rana arvalis, Rana lessonae, Bufo viridis, Bufo calamita, Lacerta agilis.
- FUNCTION:  Corridor for aquatic insects Graphederous billenatus, Dystiscus lattassimus, Leuchorinia  pectoralis/albifons/caudalis, Sympecma paedisca.

# Terrestrial habitat: Emys nest site

# Protected nest of Emys Orbicularis

# European Experience involved

- LIFE EMYS ORBICULARIS 2004-2008: Northern range with Germany, Poland, Lithuania. Experts from 3 countries provided experince in Aquatic restoration for juveniles, summer and hibernation, terrestrial (NEST) restoration.
- HYLA ARBOREA: Denmark 1983-2014: More than 1000 ponds restored. Schleswig Holstein 2004-2014: More than 300 ponds restored.
- Breeding programmes in Both countries: DK,D

# European Experince

- LIFE BOMBINA 1999-2003, Denmark LIFE Bombina 2004-2009: Germany, Sweden, Latvia, Denmark: Aquatic habitat restoration.
- LIFE CRISTATUS 2004-2008, Estonia, Finland, Denmark, Aquatic habitat restoration.
- LIFE LAGOONS 2004-2112. SH-D,S,E,DK and LITHUANIA. B.calamita/viridis. Aquatic habitat restoration.
- LIFE PELOBATES and LEUCHORINIA 2010-2015, Estonia, Denmark, Aquatic habitats .

# In Lithuania the project builds on

- Inventories  and older data of Emy orbicularis and Hyla arborea from before 2000.
- GEF project for Emys orbicularis protection in Herpetology Reserves 2000-03
- LIFE project for Emys orbicularis, Bombina bombina and Triturus cristatus inside 5 Natura 2000.
- 2009-2013: LIFE ecological corridors.

# Emys orbicularis

- Before 2000: Setting up Herpetological reserves
- 2000-2003: Active protection with water table raise, pond digging and nest protection.
- 2004-2008: 70 pond digging and restoration nest protection and cattle farms inside Natura 2000
- 2009-2013: IN CORRIDORS: >150 pond digging and restoration, water table raise, nest protection. Cattle farms. Artificial rearing of eggs from threathend nest.
- RESULTS: New ponds are colonized from 2007-2013. But turtles reproduce slow.

# Hyla arborea

- Before 2000: Inventories
- 2000-2008: 2 new ponds made in core area
- 2009-2013: BUILDING A CORIDOR: >30 ponds designed for HYLA ARBOREA from Belarus border in south to TURTLE corridors in PETROSKAI FOREST IN NORTH. Total >150 new and restored ponds in the network is avalible for Hyla arborea.
- RESULTS: Hyla population is stabilized and colonized northwards to Petroskai forest. Fast reproduction.

# Goals amphibians in corridors to benefit

- Bombina bombina
- Triturus cristatus
- Pelobates fuscus
- Rana arvalis
- Rana lessonae
- Possibly Bufo viridis and Bufo calamita
- Other amphibians.

# Peloates fuscus benefits from ponds, sandy habitats and cattle farms.

# Leuchorrinia pectoralis benefit from restored and new ponds








# Coridors of ponds and sandy habitats for other species?
# Aquatic/terrestrisl insects, reptiles:
# Dytiscus lattassimus.
# Graphoderus billenatus.
# Leuchorrinia pectoralis/ albifons
# Aeshnea viridis
# Lacerta agilis

II+IV

IV

IV

II+IV

IV

# Leucorrhinia pectoralis
# II + IV

# Leucorrhinia albifrons
# IV

# Aeshna virids IV

Narew, Poland

# Graphoderus bilineatus
# II+IV

# Vertigo

## geyeri

## angustior

## moulinsiana

# The field escursion will show corridos with :

- Pond restoration and new ponds for Emys orbicularis, Hyla arborea, triturus cristatus.
- Creation of new terrestrial habiats and old nesting sites of Emys orbicularis.
- New ponds colonized by EU protected invertebrates.
- How cattlefarms can be established and maintain the habitats in the corridors.